In-Delta Storage Program
BDPAC Water Supply Subcommittee
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DRAFT SUPPLEMENTAL REPORT to the 2004 DRAFT STATE FEASIBILITY STUDY

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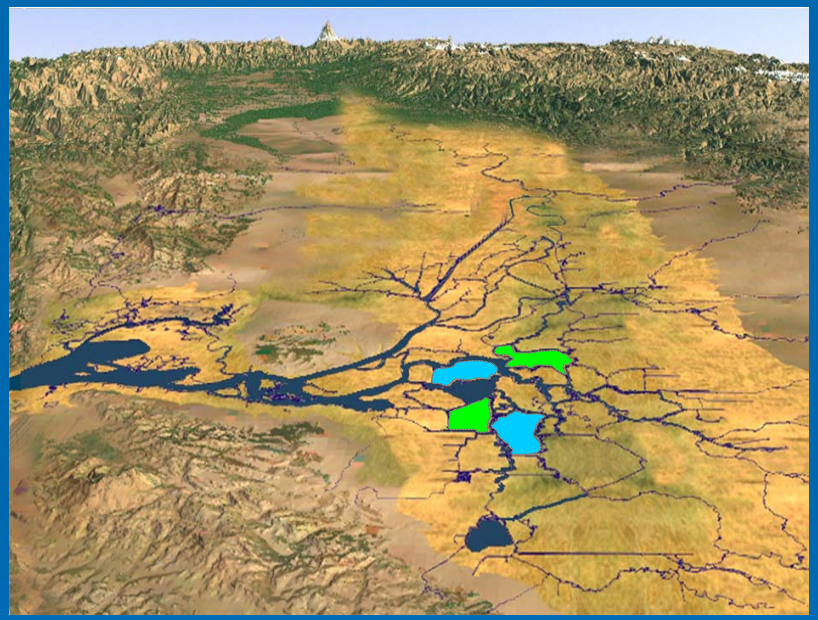
Presentation Outline

- Overview
- Key Findings
- Proposed Process
- Recommendations
- Action



Proposed In-Delta Storage Project

Overview

- This Report
  - Prepared in response to comments received on 2004 *Draft In-Delta Storage Program State Feasibility Study*.
  - Describes new/revised studies on water supply and quality, project design, risk analysis, environmental evaluations, construction costs
  - Contains new information gathered by DWR during the 2004 Jones Tract flood.
  - Includes revised project cost estimates, refined project operations, revised risk analysis, and additional information on specific technical issues.

Key Findings

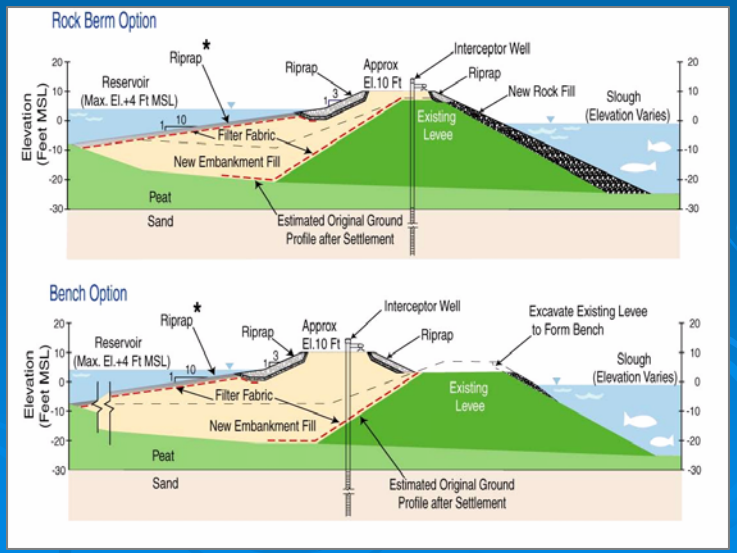
- Water Supply Operations
  - Average annual yield varies—107,000 acre-feet (initially) to 120,000 acre-feet (long-term)—due to decreasing carbon loading rates.
  - Water supply, EWA, ERP, and water quality benefits can occur simultaneously under each operational scenario.
  - Reaffirms many of the conclusions stated in the 2004 *Draft In-Delta Storage Program State Feasibility Study.*

Key Findings (cont.)

- Water Quality
  - Water quality modeling
    - Simulations comply with short-term annual water quality regulations and agreements.
    - Did not consider effects of ceasing current project island agricultural drainage on Delta channel water quality. This may affect project operation and project yields.
  - Water quality data collected during the Jones Tract flood indicate that dissolved oxygen and temperature of water stored on Delta islands may vary significantly with time of day.
    - This may require refinement in operations and implementation rules to assure that water discharged from the islands meets fishery requirements. This could affect project yield.
  - Dissolved Organic Carbon
    - Experimental results indicate that organic carbon loading rates may decrease over time.
    - Results from Jones Tract flood closely resembled initial rates of experiment.

Key Findings (cont.)

- Engineering Considerations
  - Project Cost:
    - Initial estimated project cost $774 million
    - Increase to $789 million due to new information on foundation soils and riprap slope protection.
  - Seepage to Adjacent Islands:
    - Seepage conditions at McDonald Island during Jones Tract flooding indicates that current seepage modeling is reasonable.
  - Embankment Stability:
    - Rip rap recommended over soil cement for reservoir side slope protection

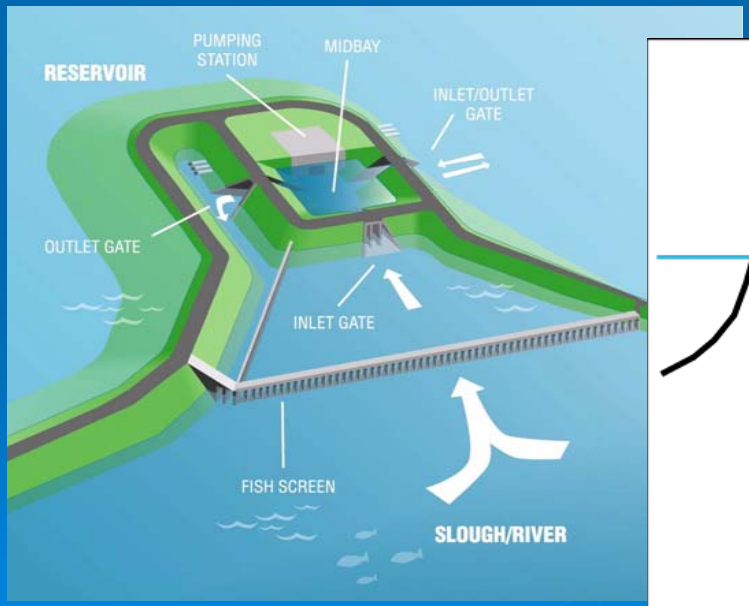


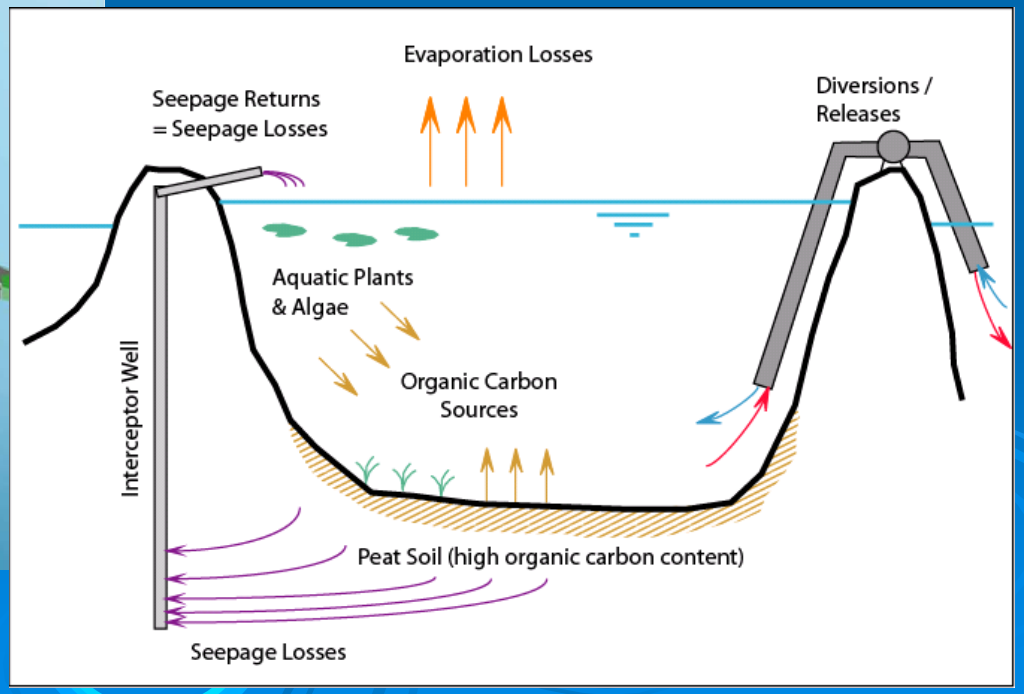
Key Findings (cont.)

- Engineering Considerations
  - Risk Analysis:
    - Updated to consider additional infrastructure (aqueducts, railway and pipelines) and recent Jones Tract Flood information.
      - The cost of a failure is now projected to be much higher than estimated in the original risk analysis.
      - Project reduces the failure probability and the economic losses by factors of 6 to 10 compared to existing conditions.

Key Findings (cont.)

- Technical Feasibility:
  - Project is technically feasible. DWR can safely design, construct and operate an In-Delta Storage Project.





Key Findings (cont.)

- Environmental Evaluations
  - The California Environmental Quality Act requires a subsequent Environmental Impact Report (EIR) due to changes to the original Delta Wetlands proposal.
  - Two years of extensive surveys found no giant garter snakes on the Webb tract and Bacon Island.
  - Estimates of giant garter snake habitat revised downward by 50%.

Key Findings (cont.)

- Economic Uncertainty
  - Additional work would be necessary to further reduce the economic uncertainty regarding project operations and thereby better define project benefits.
  - The existing economic analysis does not capture all of the potential project benefits and, therefore, fails to demonstrate the full economic value of the project.

Proposed Process

- The staff draft report will be released this week.
- After the Subcommittee makes a recommendation on the Draft Supplemental Report, the report will go to the BDPAC and the Policy Group to adopt this recommendation.
- After adoption by the Policy Group, the report will be finalized.

Recommendation

See handout

Action

- DWR asks the Subcommittee to concur with Draft Supplemental Report recommendations.